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(54) New cosmetic oil, and compositions contained in it.

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The object of the present invention is a new oil to be used in cosmetology, along with some compositions designed for cosmetic usage contained in this oil.

It is well known that oils, used in cosmetology, "cosmetologic oils", are liquid products with a low volatility at ambient temperature.

One of their properties is to dissolve various inorganic substances insoluble in water, which presence is desirable in compositions used in cosmetology.

They are insoluble in water and they can result, when mixed with it, in the formation of emulsions, in which water constitutes either the continuous phase or the dispersed phase in the form of small droplets.

The principal characteristics of oils are their smooth feeling to the touch and their lubricating properties, which usually facilitate the application and the spreading on the skin while leaving a hydrophobic film on its surface.

This latter property is linked to the emollient character of cosmetic oils. The emollient nature of these oils is illustrated by the improvement or the preservation of the skin suppleness. This property can be explained by the formation of the hydrophobic film that allows sustaining the skin water content by preventing its evaporation even in dry or cold atmospheric conditions. In the case of emulsions designed for cosmetic usage, the emollient nature can be partly described by the transfer of the water present in the emulsions to the skin to maintain its water content.

However, each oil has a different emollient capacity and only a restricted number of oils are practical to prepare useful cosmetic products.

In addition, as mentioned above, their oily feel, resulting from their lubricating character, constitutes a valuable property since it facilitates the application on the skin.

Although, this property becomes a nuisance when the residual film left on the skin retains an oily sensation, or sometimes a slightly greasy and sticky sensation, which are unpleasant and undesirable characteristics.

It is fair to mention that, to this day, such undesirable characteristics are almost always encountered at different levels for cosmetic oils.

Incidentally, the practice shows that certain oils give rise to a "pulling sensation" when they are applied, and this characteristic is considered unpleasant.

Another inconvenient, related to the usage of oils in cosmetic compositions, is that the oily film left on the skin has a more or less pronounced shiny luster, generally regarded as a poor aesthetic property.

The present invention is aimed at providing an oil that does not display, or that only displays to a slight level, the disadvantages described above.

Oils used in cosmetic products are, for instance, vegetable oils.

It is known that vegetable oils primarily contain esters, principally glycerides of fatty acids, referred as saponifiables, and also an unsaponifiable fraction.

It is also well known that unsaponifiables display interesting dermatological properties, and their usage has been prescribed in cosmetic compositions to improve the condition of older, dry or rugged skins.

However, compositions containing unsaponifiable fractions exhibit, as for all compositions prepared with oils, the same disadvantages, discussed above, that is to say that their application can for instance result in the formation of a lustrous and oily film unpleasant to the touch.

The more an oil leaves an oily film, unpleasant visually and to the touch, the less it is considered penetrating.

The object of the present invention is a cosmetic oil with exceptional penetrating property.

This cosmetic oil, that contains a mixture of at least two vegetable oils, is characterized by the fact that the so-called vegetable oils are jojoba oil and sunflower oil, and by the fact that it contains at least one previously extracted unsaponifiable fraction, and/or some pistachio oil.

Unsaponifiables of soy and of avocado, and their combination are examples of unsaponifiable fractions. One remind that the preparation of unsaponifiable fractions is well known and can be performed by submitting a fatty source to an operation of saponification and/or by extraction the unsaponifiable portion.

It is known that unsaponifiable fractions are composed of numerous constituents, and their compositions are not entirely known. It is obvious that the composition of an unsaponifiable fraction depends for example on its preparation method, and particularly on the extraction solvents that are employed.

For instance, the derived fractions can contain a residual portion of saponifiable ingredients and they can basically represent a fraction enriched in unsaponifiable products.

In the present demand, the meaning of the expression "unsaponifiable fraction" does not only encompass the unsaponifiable fraction (or a part of it), previously extracted, but, in addition, it covers a fraction enriched in unsaponifiables, containing a

residual part of the saponifiable components of the starting oil. The proportion of unsaponifiable ingredients of such an enriched fraction is greater than 40 weight percent.

The new cosmetic oil, object of this invention generally contains, in weight percent, from 20 to 40 % of unsaponifiable fraction, and/or of pistachio oil, from 20 to 45% of jojoba oil, and from 20 to 45% of sunflower oil.

When the unsaponifiable fraction is a mixture of unsaponifiables of soy and unsaponifiables of avocado, the weight ratio of unsaponifiables of soy to unsaponifiables of avocado can vary between 1:4 and 3:1, and is preferentially 2:1.

The cosmetic compositions containing the new oil as described above are also part of this invention. The other components of these compositions are common ingredients.

These cosmetic compositions are, in the main, all cosmetic compositions containing oils. These compositions, their other ingredients, their preparation and their usage are well known in the field. In general, they contain at least 10% of cosmetic oil according to the invention.

Compositions resulting in fluidic emulsions (milk) of lotions or thicker emulsions (cream) are among the compositions of the invention.

For example, these compositions are milks or emollient creams, milks or creams for hand treatment, milks or creams for make up removal, make-up foundations, sunscreen milks or creams, suntan milks or creams, anti-perspiring milks or creams, shaving creams or gels, pre-shave lotions, or milks or creams designated for the skin treatment of newborns.

The cosmetic oil of this invention can also be included in the preparation of other compositions such as coloring or moisturizing lipsticks, compositions for eye make-up and facial make-up base.

The cosmetic compositions of the present claim, presented under solution form, are for instance sunscreen oils (containing, in addition the cosmetic oil, an ultraviolet filter), oils for hand treatments, oils for the body, pre and after-shave oils, bathing oils, etc.

The proportion of cosmetic oil of the invention can generally vary from 10 to 100% in the compositions prepared under solution form. For the other cosmetic compositions of the invention, the cosmetic oil generally represents from 10 to 50 weight % of the total weight of the composition.

In addition to the cosmetic oil, the compositions of the invention usually contain at least one of the following ingredients: preservative agent, anti-oxidizing agent, perfume, coloring agent, etc.

The following experiment was realized in order to demonstrate the excellent penetrating properties of the cosmetic oil of the invention.

Equal quantities of the following oils were applied on the back of the hand of several volunteers:

- Oil No 1: jojoba oil
- Oil No 2: sunflower oil
- Oil No 3: unsaponifiables (1/3 of avocado unsaponifiables and 2/3 of soy unsaponifiable)
- Oil No 4: 50:50 mixture of jojoba oil and of sunflower oil

- Oil No 5: 50:50 mixture of jojoba oil and unsaponifiables (of oil No 3)
- Oil No 6: 50:50 mixture of sunflower oil and unsaponifiables (of oil No 3)
- Oil No 7: 1:1:1 mixture of jojoba oil, sunflower oil, and unsaponifiables (of oil No 3).

Eight volunteers applied each oil and ranked from 0 to 10 the penetrating properties of the applied oil. The penetrating properties were evaluated according to:

- the touch after application,
- the appearance after application,
- the rate of penetration.

Each oil was ranked from 0 to 10, a ranking of 10 corresponding to an excellent penetration.

The ranking average for each oil are presented in the following table:

Oil No	Ranking Average
1	5.81
2	4.69
3	6.13
4	6.19
5	7.81
6	5.5
7	8.31

The analysis of variance and the Student test performed of this experiment shows the ranking of oil No 7 is significantly different than the ranking of the other oils.

The following examples illustrate the invention without limiting it:

EXAMPLE OF PREPARATION OF COSMETIC OILS

Example A

	Weight %
Jojoba oil.....	33.3
Sunflower oil.....	33.3
Unsaponifiables of soy.....	22.2
Unsaponifiables of avocado.....	11.2

Example B

Jojoba oil.....	35
Sunflower oil.....	40
Unsaponifiables of avocado.....	25

Example C

Jojoba oil.....	20
Sunflower oil.....	40
Unsaponifiables of avocado.....	15
Unsaponifiables of soy.....	25

Example D

Jojoba oil.....	30
Sunflower oil.....	35

Unsaponifiables of avocado 15

Unsaponifiables of soy 20

Example E

Jojoba oil 35

Sunflower oil 30

Unsaponifiables of avocado 15

Unsaponifiables of soy 20

Example F

Jojoba oil 40

Sunflower oil 30

Unsaponifiables of avocado 10

Unsaponifiables of soy 20

Example G

Jojoba oil 33.3

Sunflower oil 33.4

Pistachio oil 33.3

Example H

Jojoba oil 40

Sunflower oil 40

Pistachio oil.....	20
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Example I

Jojoba oil.....	25
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Sunflower oil.....	35
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Pistachio oil.....	40
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Example J

Jojoba oil.....	35
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Sunflower oil.....	35
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Pistachio oil.....	15
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Unsaponifiables of avocado.....	15
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Example K

Jojoba oil.....	25
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Sunflower oil.....	25
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Pistachio oil.....	25
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Unsaponifiables of avocado.....	25
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EXAMPLE OF PREPARATION OF COSMETIC COMPOSITIONS

Example 1 - BODY OIL

Weight %

Cosmetic oil of example A	99.8
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BHA (Butylhydroxyanisol).....	0.1
BHT (Butylhydroxytoluene).....	0.1
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	100.0

This body oil can be used as a starting point to formulate sunscreen oil, by adding a common ultraviolet filter.

These body or sunscreen oils can also contain perfume.

Example 2 - SUNSCREEN OIL

	Weight %
Cosmetic oil of example A	94.8
BHA (Butylhydroxyanisol).....	0.1
BHT (Butylhydroxytoluene).....	0.1
"Parsol-Ultra" sold by Givaudan corporation	5.0
(Ultraviolet filter)	
<hr/>	
	100.0

This sunscreen oil can also contain perfume.

In this example, the cosmetic oil of example A can be favorably replaced by an equal quantity of the cosmetic oil of example I.

Example 3 - MAKE-UP REMOVAL MILK

Weight %

Cosmetic oil of example A	15.00
Glycerol Stearate.....	2
Stearic Acid.....	1.40
Triethanoamine	1.30
High-molecular-weight carboxyvinyllic polymer	
Sold by Goodrich corporation under the brandname	
"Carbopol 934"	0.60
Parahydroxybenzoate of methyl	0.25
BHA	0.10
BHT.....	0.10
Perfume.....	qs
Sterilized de-mineralized water	qs 100

Example 4 - BODY MILK

	Weight %
Cosmetic oil of example C.....	15.00
Mixture of alcohols and of sterols of lanoline	
(Amerchol LIOI sold by the American	
Cholesterol Products Corporation)	0.30
Stearic Acid.....	1.40
Self-emulsionable glycerol monostearate	2.00
Cetyllic alcohol	0.20
Triethanolamine	0.95

High-molecular-weight carboxyvinyl polymer

Sold by Goodrich corporation under the brandname

"Carbopol 941"	0.25
Propyleneglycol	2.00
BHA	0.10
BHT.....	0.10
Methyl parahydroxybenzoate.....	0.35
Perfume	qs
Water.....	qs 100

Example 5 - TREATMENT CREAM

Weight %

Self-emulsionable glycerol monostearate	5.00
Cosmetic oil of example F	26.00
Methyl parahydroxybenzoate.....	0.35
Carbopol 940.....	0.4
Triethanolamine	0.95
BHA	0.1
BHT.....	0.1
Perfume	qs
Sterilized de-mineralized water	qs 100

Example 6 - TREATMENT CREAM

	Weight %
Magnesium lanolate	2.85
Alcohol of lanoline	6.65
Cosmetic oil of example J.....	48.30
Ozokerite.....	2.00
BHA	0.10
BHT.....	0.10
Methyl parahydroxybenzoate.....	0.10
Sterilized de-mineralized water	qs 100

In this example, the cosmetic oil of example J can advantageously replaced by the same quantity of the cosmetic oil of example G.

Example 7 - SUNSCREEN CREAM

	Weight %
Self-emulsionable glycerol monostearate	5.00
Cosmetic oil of example H	26.00
Methyl parahydroxybenzoate.....	0.3
Carbopol 940.....	0.4
Triethanolamine	0.4
BHA	0.1

BHT.....	0.1
"Parsol-Ultra" sold by Givaudan corporation	5.0
Perfume.....	qs
Sterilized de-mineralized water	qs 100

In this example, the cosmetic oil of example H can advantageously replaced by the same quantity of the cosmetic oil of example D.

Example 8 - SUNSCREEN CREAM

	Weight %
Magnesium Lanolate.....	2.85
Alcohol of lanoline	6.65
Cosmetic oil of example E.....	48.30
Ozokerite.....	2.00
BHA	0.10
BHT.....	0.10
"Parsol-Ultra" sold by Givaudan corporation	5.0
Methyl parahydroxybenzoate.....	0.10
Sterilized de-mineralized water	qs 100

In this example, the cosmetic oil of example E can advantageously replaced by the same quantity of the cosmetic oil of example B.

Example 9 - MAKE UP FOUNDATION

Weight %

Isopropyl lanolate.....	4.0
Stearic acid.....	2.6
Self-emulsionable stearate of glycol.....	5.0
Cosmetic oil of example K	20.0
Triethanolamine	1.2
Laural sulfate of sodium	1.1
Bentonite	2.5
BHA	0.10
BHT.....	0.10
Methyl parahydroxybenzoate.....	qs
Perfume	qs
Sterilized de-mineralized water	qs 100

And for instance:

Titanium oxide		qs according to the desired tints and masking powers
Iron oxides		
Talc		

CLAIMS

1. Cosmetic oil, composed of a mixture of at least two vegetable oils, characterized by the fact that the vegetable oils are jojoba oil and sunflower oil, and that it contains at least one previously extracted unsaponifiable fraction, and/or some pistachio oil.

2. Cosmetic oil according to claim 1, characterized by the fact that the unsaponifiable fraction is chosen among the unsaponifiables of soy and the unsaponifiables of avocado, and their mixtures.

3. Cosmetic oil according to any of the preceding claims, characterized by the fact that the so-called unsaponifiable fraction is a fraction enriched in unsaponifiables.

4. Cosmetic oil according to any of the preceding claims, characterized by the fact that it contains from 20 to 45 weight % of jojoba oil.

5. Cosmetic oil according to any of the preceding claims, characterized by the fact that it contains from 25 to 40 weight % of sunflower oil.

6. Cosmetic oil according to any of the preceding claims, characterized by the fact that it contains from 20 to 40 weight % of pistachio oil, and/or of unsaponifiables.

7. Cosmetic oil according to any of the preceding claims, characterized by the fact that it is composed of jojoba oil, sunflower oil, and pistachio oil.

8. Cosmetic oil according to any of the claims 1 through 6, characterized by the fact that it is composed of jojoba oil, sunflower oil, and an unsaponifiable fraction.

9. Cosmetic composition, characterized by the fact that it contains a cosmetic oil as defined in any of claims 1 through 8.

10. Composition according to the preceding claim, characterized by the fact that it is prepared under aqueous emulsion form.

11. Composition according to claim 9, characterized by the fact that it is prepared as a solution form.

12. Composition according to claim 9, characterized by the fact that it is prepared as lipstick, as a composition for eye make-up, or facial make-up foundation.

13. Composition according to any of claims 9 through 12, characterized by the fact that it contains at least 10 weight % of the so-called cosmetic oil.

14. Composition according to any of claims 10 and 12, characterized by the fact that the so-called cosmetic oil represents from 10 to 50 weight % of the total weight of the composition.

15. Composition according to claim 11, characterized by the fact that it contains from 10 to 100 weight % of the so-called cosmetic oil.